

Bibliometric Review of Financial Risk Tolerance: A Scientometric Analysis using Biblioshiny

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Abstract

This study provides a bibliometric analysis of financial risk tolerance research papers. This study addressed bibliometric analysis using information from Scopus. The study in this work is exploratory and descriptive, based on bibliometric methodologies and tools used to documents contained in the Scopus bibliographic database, which yielded a total of 1084 documents spanning the years 1979 to 2025. This study report made use of Biblioshiny, an open-source platform based on the R programming language, as well as VOS viewer, in order to carry out a variety of bibliometric studies and assessments. The topic of financial risk tolerance was examined using the bibliographic data, which provided a complete description of the subject matter. According to the findings of the analysis, the most significant areas of focus for research on risk tolerance over the past several years have been on financial literacy, personality factors, and financial decision making. Over the past two decades, there has been an upward trend in the amount of research done on the FRT.

Keywords: Financial Risk Tolerance, Investment, Financial Management, Scientometric Analysis

Introduction

In human life, risk is unavoidable. Within his or her comfort zone, every investor accepts a significant level of risk. When making a financial decision, risk tolerance is described as "the level of uncertainty or investment return volatility that an investor is prepared to accept" (Faff et al., 2008). Individual risk-taking ability varies from person to person and from period to period, depending on a variety of different circumstances (Hallahan et al., 2003). In terms of income, spending, savings, and investments, India's fast-growing economy has provided us with vast

growth potential. Investors nowadays are more educated, have a broad understanding of investments, and have easy access to financial data. The most important aspect of investment planning is to keep one's risk profile in mind. Examining risk tolerance is essential due to the fact that it is an important factor in determining the value of any investment option. and the ultimate aim of any financial activity is to maximise predicted revenue (Sulainman, 2012).

Given the relevance of FRT in investment decisions, past research (Sulainman, 2012; Faff et al., 2008; Hallahan et al., 2003; Grable & Lytton, 1999) has looked at a variety of factors, including demographic, social, environmental, and psychological aspects throughout time in different nations. Past research has also shown how far the financial risk tolerance has substantially increased. Taking all of this into consideration, the purpose of this study is to utilise bibliometric techniques in order to conduct an analysis of the development status and current trends in FRT research. Despite the importance of FRT, no earlier study has been located that statistically analyses the fluctuations of this research area. FRT is defined by different authors and scholars in different manner.

The exponential growth in the volume of scholarly works has made it impossible to keep up with the literature (Aria & Cuccurullo, 2017). The investigation and evaluation of huge volumes of scientific data is something that may be done with the help of bibliometric analysis, a method that is both popular and robust. It makes it feasible for us to analyse the small alterations in the evolutionary track of a certain area of study while also shedding light on the emerging subfields that are included within that subject. The act of examining and analysing published publications in order to determine the correlations that exist between them is known as bibliometric analysis.

The researcher has devised a bibliometric study to explain the effectiveness and productivity of financial risk tolerance as well as to comprehend the themes that make up it and its current condition. Additionally, none of the studies provide a summary of all the pertinent subjects addressed by this study field. to offer a more useful understanding of financial risk tolerance. In this work, the researcher employed R-based software Biblioshiny and VOSviewer to carry out a bibliometric analysis. This made it possible for us to identify and categorise the most significant topics within the research field in terms of their evolution and significance.

Methods and Data

The objective of our research is to offer a comprehensive overview of the current situation and the evolution of financial risk tolerance research, as well as to forecast its future trend. The work presented herein, in particular, aims to identify and visualise trends, thematic patterns, and topics of high interest to researchers in the domain of FRT in the hope of assisting researchers in identifying fundamental influences from categories, journals, references, research topics, and emerging trends in the field. The selection of a scientific database and the collecting of information about published literature is the first stage of an extensive bibliometric study. In the Scopus database, the keyword "financial risk tolerance" was searched solely in the title, abstract, and keyword. The researcher did a topical search and retrieved 1084 bibliographic material from the Scopus database; the number of files may fluctuate as additional papers are released throughout time. According to the data download, 2998 writers wrote a total of 1084 articles, with 183 of them being single-authored and the rest being multi-authored. Each publication has 3.16 co-authors on average. The annual growth rate of financial risk tolerance articles published is 9.58. Table 1 displays the basic information about the data.

Table 1. Main information about Data

Main Information about Data	Timespan	1979:2025
	Sources (Journals, Books, etc)	762
	Documents	1084
	Annual Growth Rate %	9.58
	Document Average Age	8.18
	Average citations per doc	19.75
Authors	Authors	2998
	Authors of single-authored docs	183
	Authors of multi-authored docs	2815
Authors Collaboration	Single-authored docs	194
	Co-Authors per Doc	3.16
	International co-authorships %	20.76

Source: Compiled from Biblioshiny

A Scopus database search was conducted to discover 1084 published research on financial risk tolerance from inception to June 30th, 2025. A bibliometric technique was utilised to examine retrieved articles thoroughly based on trend, subject focus, and scientific productivity. For data analysis, the R-based Biblioshiny and VOSviewer software packages were employed. This article aims to conduct a bibliometric and co-citation analysis to answer the following research questions:

- What is the increase in scholarly publications per year in terms of financial risk tolerance?
- Which journals do researchers' publications often appear in?
- Which authors are the most productive authors in financial risk tolerance?
- What are the countries do collaborate regarding financial risk tolerance?
- What are the keywords mostly used in the field financial risk tolerance?

This study seeks to ascertain the evolving trend of financial risk tolerance research as published in top journals indexed by Scopus. The Scopus data collection was chosen for the current study because it provides the greatest number of thorough peer-reviewed studies on the research topic. The data is then processed and examined with the biblioshiny and VOSviewer applications to create a bibliometric map of the evolution of financial risk tolerance

Results and Discussion

This section presents the current state of the art research on financial risk tolerance related construct. For this objective, the Scopus database was consulted. The Scopus database contains the most complete collection of peer-reviewed publications in management, organisation, and social science. It includes over 5000 publishers, over 24600 active titles, over 194000 books, 75 million objects, and over 1.4 billion cited references. For the conduct of bibliometric analysis, the key “Financial Risk Tolerance” has been assessed using the “title, abstract, keywords” search in Scopus database. The analysis is based on the 1084 published documents downloaded from Scopus database on the topic of financial risk tolerance.

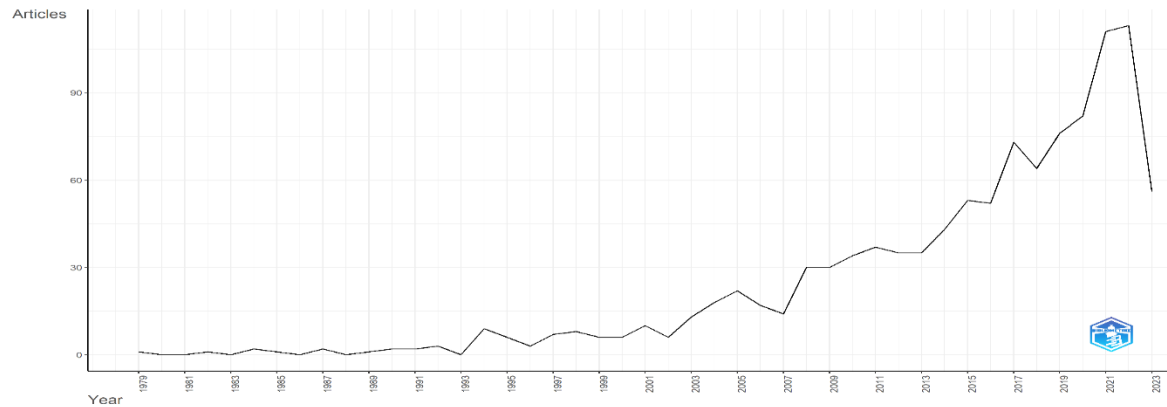


Fig 1. Annual Scientific Production

Figure 1 presents the year wise development of financial risk tolerance construct. The financial risk tolerance construct has gained a significant attention in last decade only. The first publication on financial risk tolerance construct in Scopus database year back to 1979. During 1979 to 2001 a limited attention has been paid to this area of research. There after the financial risk tolerance construct has witnessed an exponential growth. The large evolution on the research on financial risk tolerance was during 2002 – 2025. The analysis between 1979 and 2025 shows a concentrated production on more than one thousand papers, written by 2998 authors. The results show an increase in the production of research on FRT starts from 2002, and spotted as the peak of publication in 2022. The highest number of papers are registered between 2009 and thus confirming this is a rather new topic in its development.

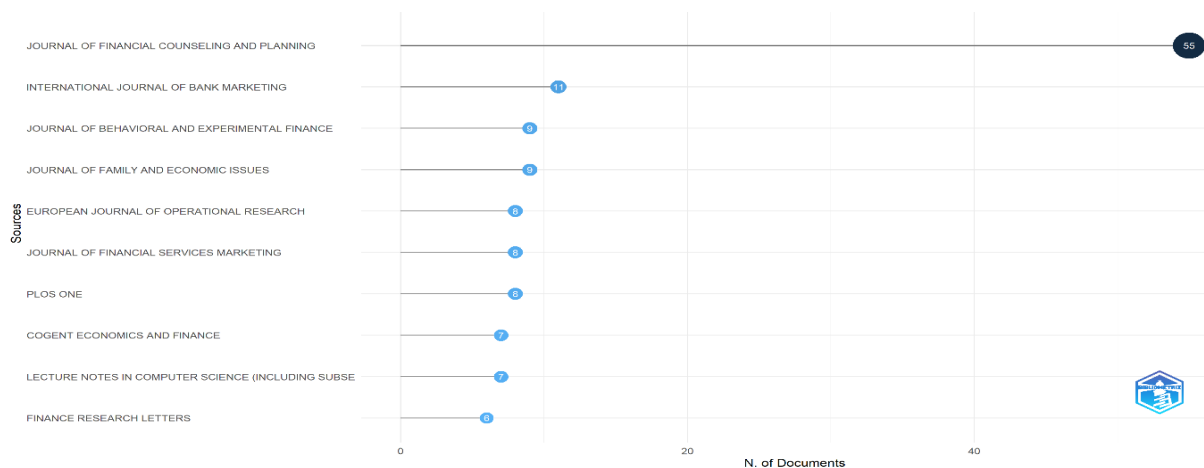


Fig 2. Most Relevant Sources

Figure 2 presents the analysis of documents published in between 1979 -2025 by source type. It reveals that “Journal of Financial Cancelling and Planning” was the journal that published the highest number of articles on FRT during the period 1979-2025 with total 55 publication. International journal of bank marketing was the second leading journal with 11 articles found on FRT. Scholars have published a total of 9 articles in the Journal of Behavioral and Experimental Finance and 9 papers in the Journal of Family and Economic Issues.

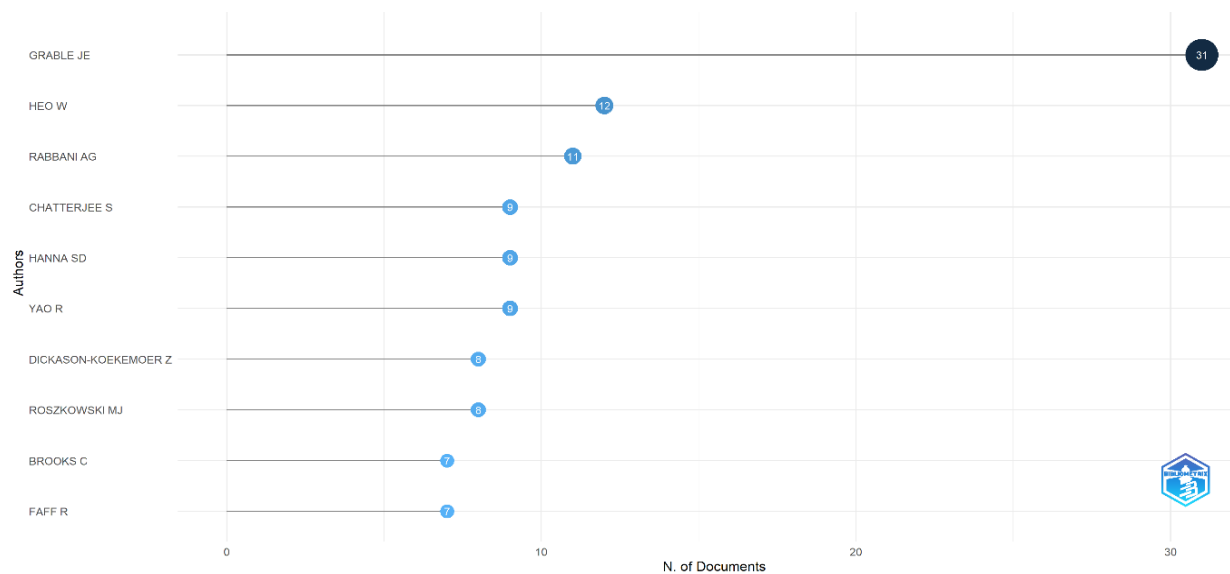


Fig 3. Most Relevant Authors

Figure 3 presents the field of financial risk tolerance on authors context; the Scopus database recognizes the contribution of 2998 authors. Here, it is worth referring that out this list top 10 author we considered in this analysis. With 31 documents, Grable J.E is explicitly the most productive author in this research domain followed by Heo W, Rabbani A.G, Chatterjee S, Hanna S D, Yao R, Dickason-Koekemoer Z, Roszkowski M J, Brooks C, and Faff R has contributed papers in the duration of 1979 - 2025.

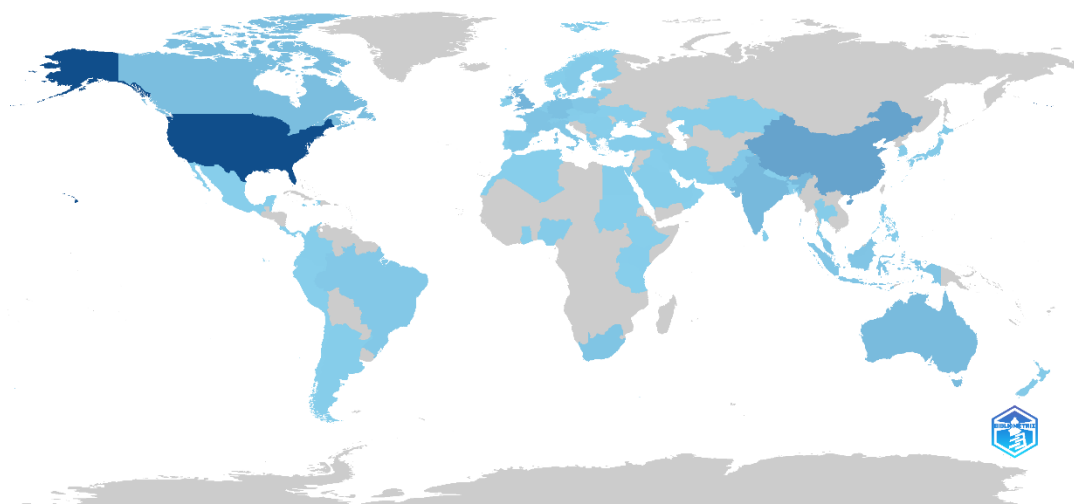


Fig 4. Country Scientific Production

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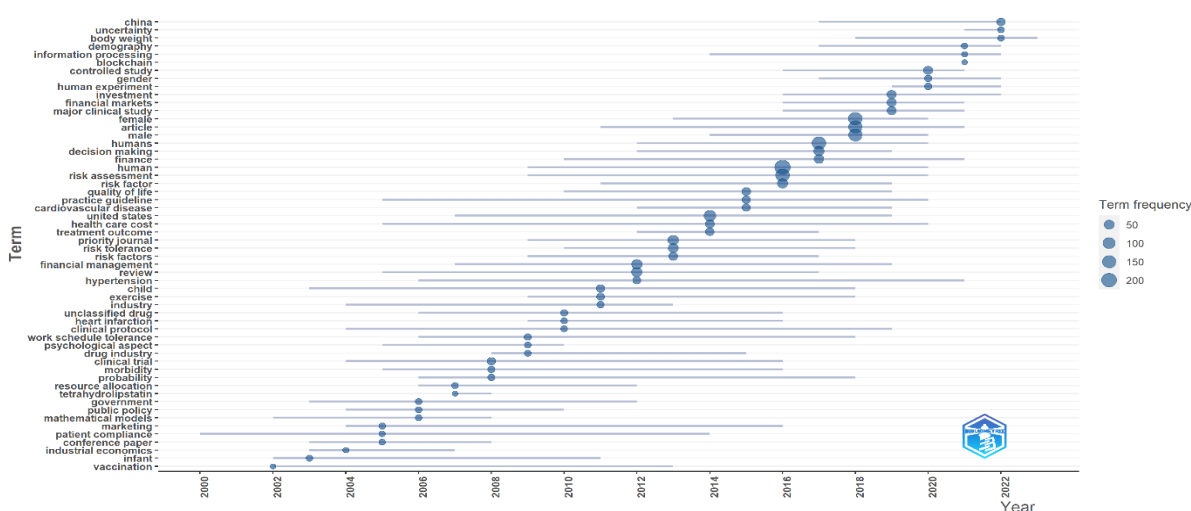


Fig 5. Trend Topics

Figure 5 displays the most frequently reported trend themes over the course of several years in the field of FRT. The figure 5 shows that in 2012 the highest trend topic was financial management while it was “risk assessment” in 2016 and “financial market” in 2014. In 2015 “demography” was having the highest frequency whereas in 2022 “uncertainty” got the highest frequency.

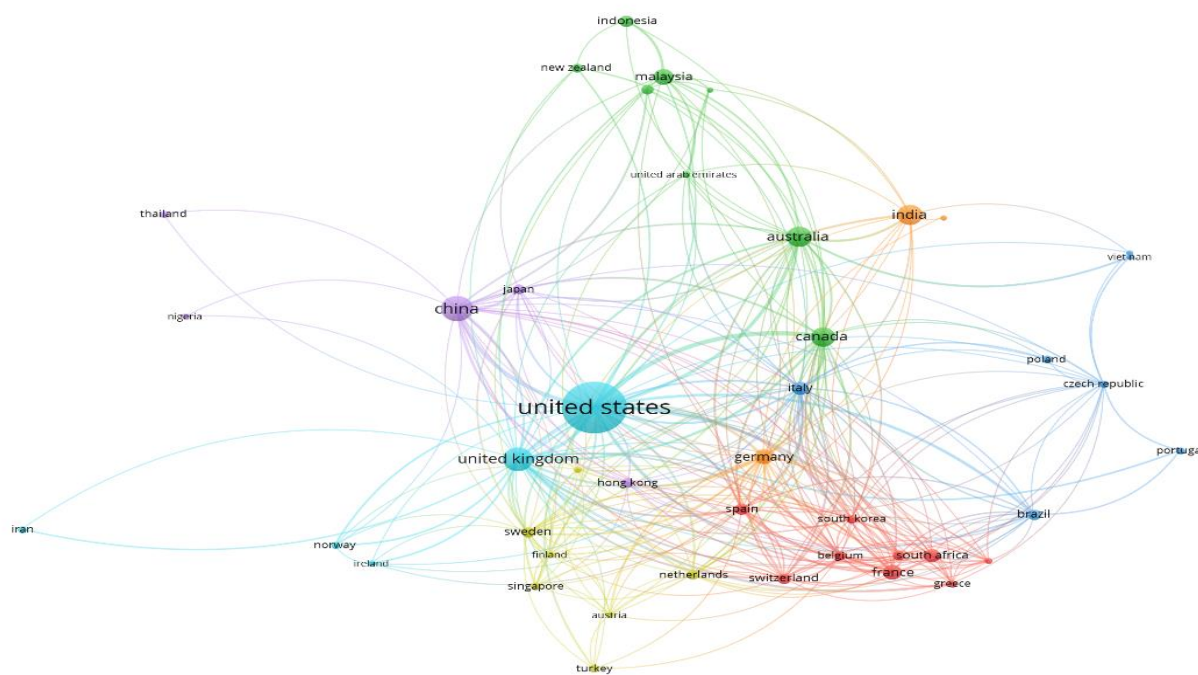
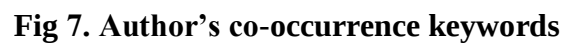


Fig 6. Bibliometric Connection between Countries

According to the graphical view of the overall bibliographic connection between countries presented in Figure 6. The developed country, United States has made the highest publication. This analysis was obtained when an article from country X and country Y both cite a common article from country Z. The node in Figure 6 indicates a country and the size of the node reflects the number of articles published in that country. The findings shown that United States has a high degree of financial risk tolerance studies. Apart from USA, China, and the United Kingdom are at the forefront of developing financial risk tolerance research. It also shows that, developing country, India has the made large number of publications after United Kingdom followed by Canada and Australia.



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Figure 8 presents an overlay visualization of all keywords' co-occurrence. Although the elements are colored differently, it is similar to network visualization. In overlay visualization, elements can be colored in one of two ways. The shades range from blue, which signifies lighter weight, to green or yellow, which represents heavier weight (Gillani et al., 2022). Figure 8 shows that before 2014, the research was highly concentrated on the implications of practicing financial risk tolerance, and the keywords focused on financial management, consumer finance, risk factor, risk assessment, economics, financial. After 2014, the research focused on investment, risk tolerance, financial data processing, decision making, and risk preference. The analytical research indicates a connection between investment decisions and risk tolerance.

Conclusion

The study aims to provide a comprehensive bibliometric study financial risk tolerance. The analysis was conducted using performance analysis based on the Scopus database using VOSviewer and Biblioshiny software. The study analyzed articles published from 1979 to 2025. According to the findings, research on financial risk tolerance has continued to attract increased attention from academics, notably since 2001. Additionally, the statistics revealed United States, China, United Kingdom and the India are the four leading nations for producing articles on financial risk tolerance. The findings also revealed that the most frequently used keywords are risk tolerance, risk aversion, risk, investors, personal finance, financial literacy, investment decisions, financial knowledge, behavioral finance, financial behavior. Based on the findings, financial risk tolerance research is very much linked to the investment and financial counselling field. Financial risk tolerance research provides a common ground for a variety of subject areas such as economics, sociology, and psychology. Recently, research on the practice of financial risk tolerance is growing at a rapid pace. Hence, the findings in this study are dynamic and will change over the years. Therefore, it is recommended that this study be replicated in the future. Despite the fact that financial risk tolerance as one of the most important aspects of financial decision making in developed and developing nations, according to the data, developing nations have made greater investments in financial risk tolerance research. However, additional research in numerous fields of study in both developing and developed nations is needed on the beneficial impact and limitations of adopting financial risk tolerance in financial and investment decision making. This study recommends that financial risk tolerance be recognized as a critical component in encouraging investment decision making by policymakers, financial institutions, and household members.

References

- [1] Aria, M., & Cuccurullo, C. (2017). bibliometrix : An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959–975. <https://doi.org/10.1016/j.joi.2017.08.007>
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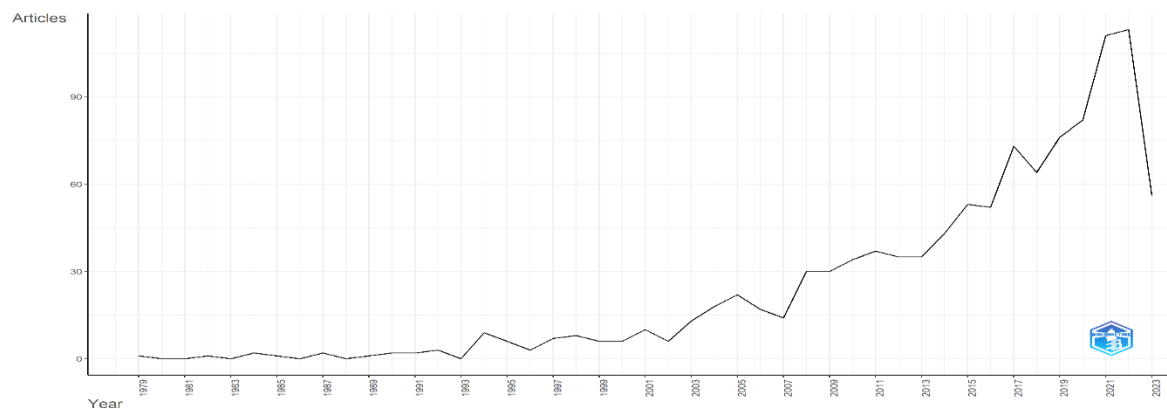


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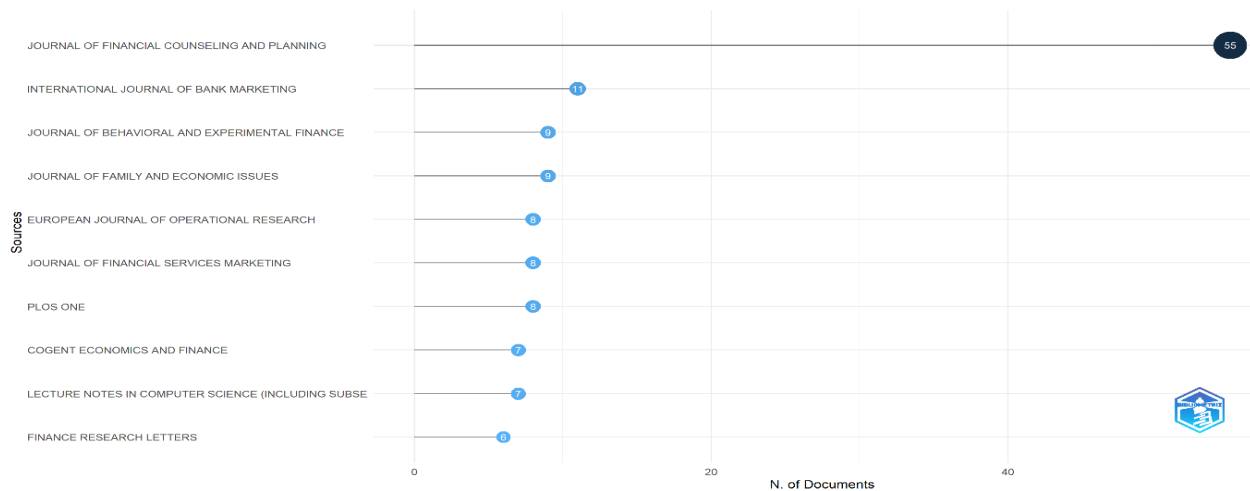


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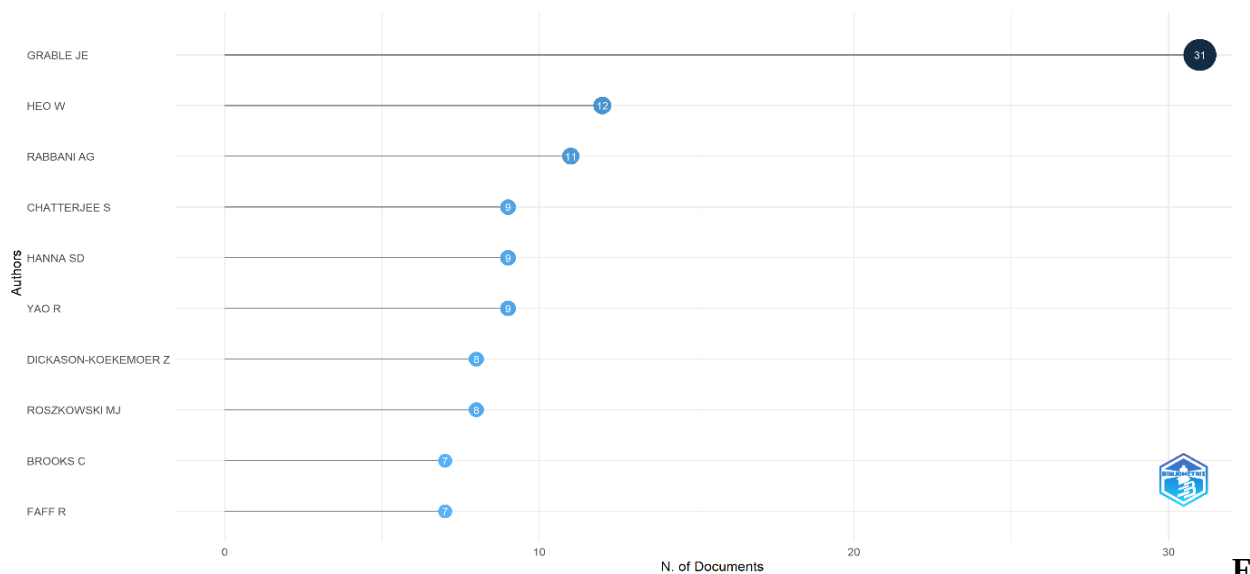


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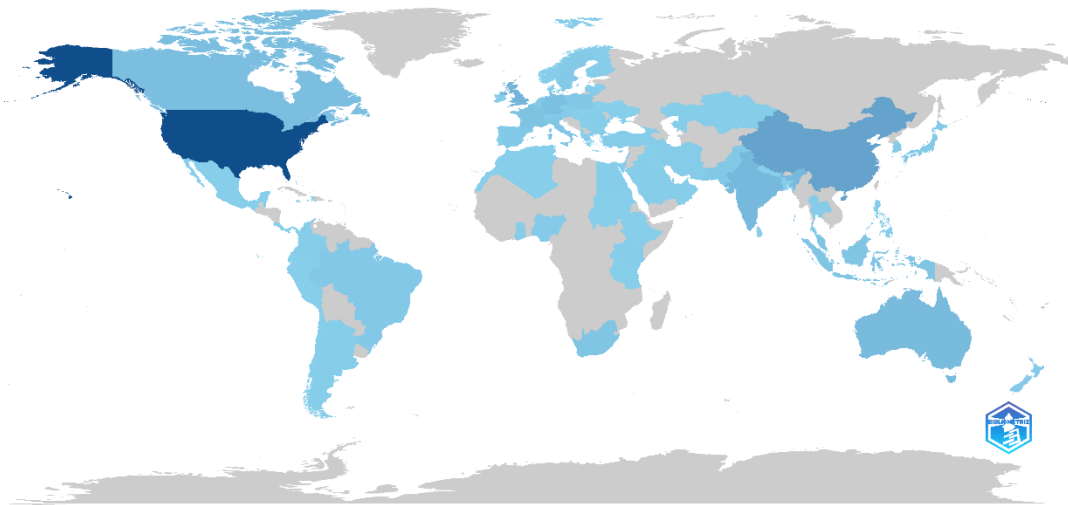


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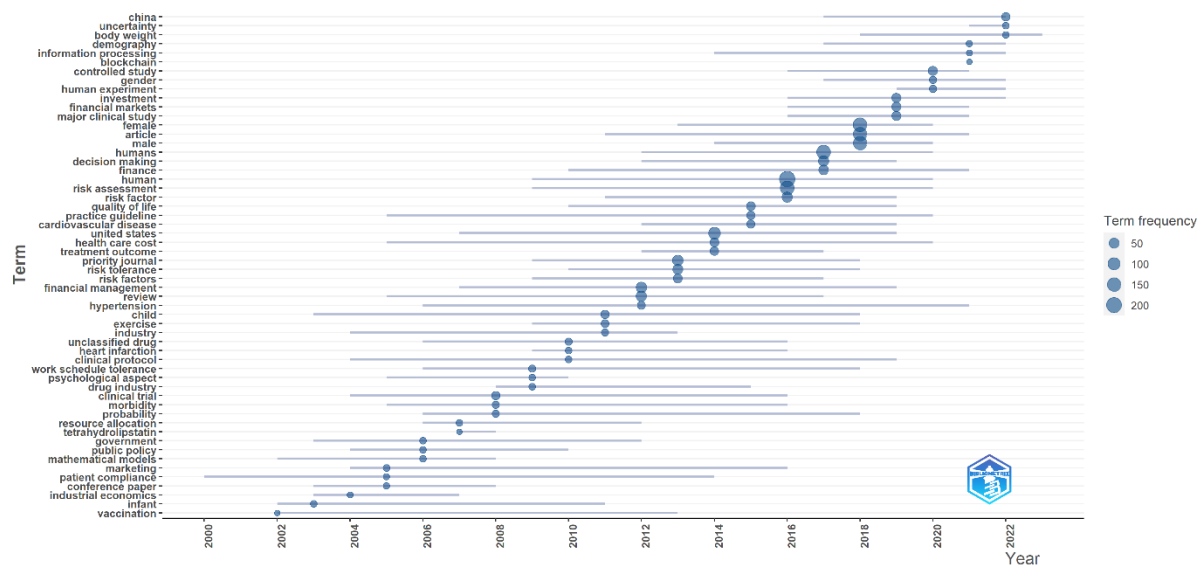


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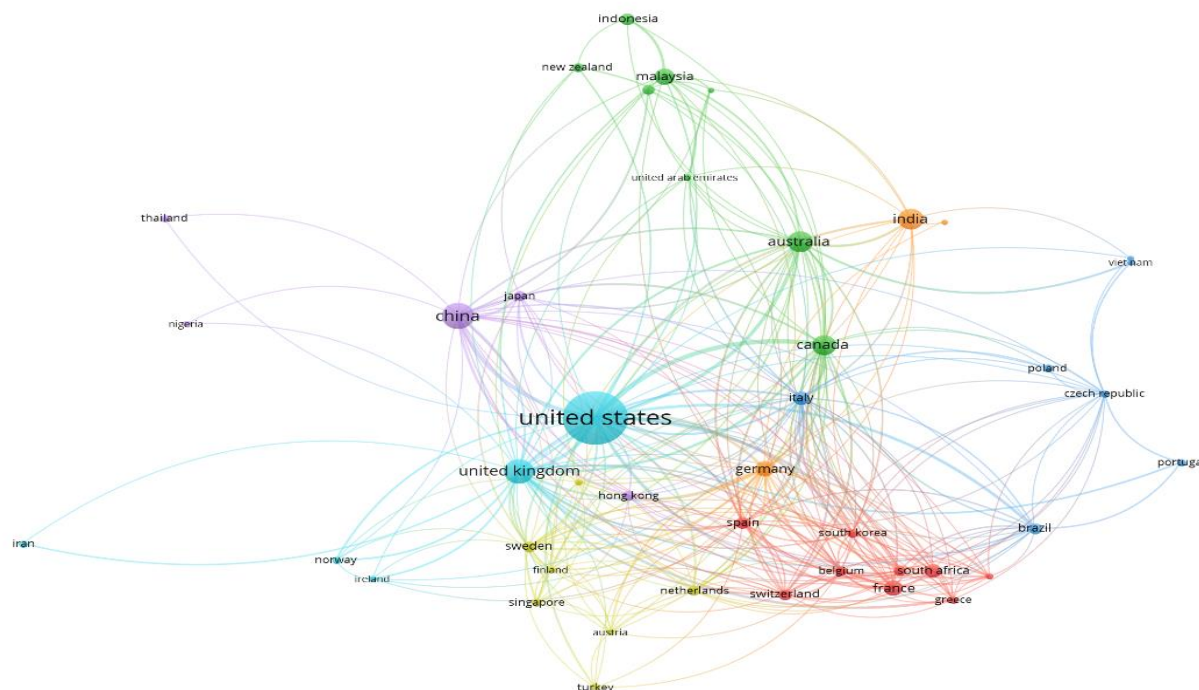


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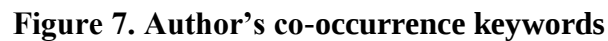


Figure 7 presents the most commonly used keywords by authors in their financial risk tolerance research. Apart from risk tolerance, risk aversion, risk, investors, personal finance, financial literacy, investment decisions, financial knowledge, behavioral finance, financial behavior, financial wellbeing, retail investors, financial decisions, risk attitude, risk preferences, personality traits, financial planning is the repeatedly used keywords by authors. The recent bibliometric data verified that a greater number of researchers made contributions that are noteworthy to the field of study on their financial risk tolerance, notably in behavioral finance.



Conclusion

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